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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,973	10/29/2001	James H. Bennett	7190-D20	3960

7590

06/13/2003

BASF CORPORATION  
PATENT DEPARTMENT  
1609 BIDDLE AVENUE  
WYANDOTTE, MI 48192

EXAMINER
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DICUS, TAMRA

ART UNIT	PAPER NUMBER
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1774

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DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/052,973

Applicant(s)

JAMES H. BENNETT ET AL.

Examiner

Tamra L. Dicus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

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## DETAILED ACTION

### *Response to Amendment*

The 112 rejections are withdrawn due to further consideration.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 20-25 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,407,988 to Kogowski.

Kogowski teaches granite-looking ASA copolymers (prepared by polymerizing acrylonitrile, styrene, and an acrylate such as acrylic acid, PMMA, where copolymer blends contain polymers from 1 to 50 weight percent acrylonitrile, styrene, and acrylate) are well known thermoplastics and may be molded with colorants of orange, green, and black (plurality of particles) through an extruder having 3 zones to produce a plaque (sheet-like molded thermoplastic product), also other polymers suitable for blending include polyesters PET and PBT (meeting new limitation “color-containing thermoplastic resin system comprising a pigment or dye and a resin compatible with extruded thermoplastic for creating appearance on surface”). A plaque inherently has at least one visible surface, see also col. 1, lines 18-30, that include such material used to make products such as bathtubs, shower stalls, and spas. See further col. 2, lines 5-65 col. 3, lines 1-20 and patented claims 1-33.

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3. Claims 20, and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5059,471 to McNally et al.

McNally teaches a tile product composed of thermoplastic extruded material such as polypropylene or polybutylene, or other polymeric resins that further comprise pigmented colorants of various colors of red, green, blue, white, and black and particles having a U.S. mesh size between 60 and 200, meeting the Applicant's range from -10 to +5000. Refer to col. 2, lines 5-45. Such tile creates a unique appearance (meeting the new limitation "color-containing thermoplastic resin system comprising a pigment or dye and a resin compatible with extruded thermoplastic for creating appearance on surface"). McNally teaches a first layer of thermoplastic vinyl polymer, polypropylene or polybutylene as the tile base and applies a second layer of plurality of particles or chips that may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material with a compressive force such as a direct roll coater. See col. 1, lines 43-66.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,407,988 to Kogowski in view of USPN 6,136,441 to MacGregor et al., USPN 5,059,471 to McNally et al., and USPN 5,496,630 to Hawrylko et al.

Kogowski does not explicitly disclose a first layer adhered to a second layer structure of claim 27. However, McNally teaches a first layer of thermoplastic vinyl polymer, polypropylene or polybutylene as the tile base and applies a second layer of plurality of particles or chips that adhere to the first layer and may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material with a compressive force such as a direct roll coater. See col. 1, lines 43-66. Hence it would have been obvious to one of ordinary skill in the art to modify the thermoplastic grante-looking product to define such a product with color and resin in a layer adhered to a thermoplastic layer since Kogowski teaches the product extruded and McNally teaches producing these two compatible layers adhering to each other to make a decorative tile.

5. Kogowski does not expressively disclose the mesh size of the particles in the color-containing system of claims 26 and 33. However, McNally discloses color particles or chips may be included from 77 to 100 weight percent and are formed in a resin such as an acrylic or ABS material, have a U.S. mesh size between 60 and 200, meeting the Applicant's range from -10 to +5000. Refer to col. 2, lines 24-45. Hence it would have been obvious to one of ordinary skill in the art to modify the colorant particles and polymer blend of Kogowski to further include colorant particles having a U.S. mesh size as claimed since McNally teaches it is suitable for ABS/acrylic materials and may contain a single or various colors of red, green, blue, white, and black pigmented resins for use in a thermoplastic produced tile and by using various particle size creates an illusion depth appearance (meeting new limitation "color-containing thermoplastic resin system comprising a pigment or dye and a resin compatible with extruded thermoplastic for

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creating appearance on surface”) at col. 2, lines 25-68, col. 1, lines 43-68, col. 4, lines 1-10, col. 5, lines 44-56, and Example 2.

Kogowski does not explicitly disclose polycarbonate blended with ABS or ASA or the blend ratios of claims 24, 29, and 31. Further regarding claim 22 and addressing claims 24, 29, and 31, MacGregor teaches blends of polycarbonate and polyester from 50:50 to 90:10 at col. 6, lines 55-62 and an ABS/PC blend containing 15 to 85 weight % PC and 15 to 85 weight percent ABS resins at col. 8, lines 39-46 (including claims 28 and 30). MacGregor teaches such polymeric blends may be layered and further include decorative color interlayers. See also col. 9, lines 6-10, col. 10, lines 1-15, col. 10, lines 5-59 teaching blends of PET, PBN, PPT, MBS, ABS, polyphenylene ether and polystyrene resins. Hence it would have been obvious to one of ordinary skill in the art to further include blends of ABS or ASA with PC, PET, PBN, PPT, MBS, ABS, polystyrene since MacGregor teaches the very compatibility of these specific polymers.

Further addressing claims 23, 30, and 32 to thermoplastic binders. Hawrylko teaches a thermoplastic multilayer product disclosing it is known to blend color mica (colored particles) dispersed in liquid polymer binders such as urethanes, vinyl, acrylics, and styrene resins that are coextruded to be laminated over a substrate at col. 1, lines 55-68. Therefore it would have been obvious to one of ordinary skill in the art to modify the thermoplastic product of Kogowski to further include the aforementioned binders since Hawrylko provides color particles with resins to produce a colorful coating for a multilayered thermoplastic product at col. 1, lines 50-66.

### ***Response to Arguments***

Applicant believes that patent '988 does not teach a thermoplastic resin system with color bonded and extruded to a material. Applicant points to fibers of '988 used to make the granite-looking thermoplastic sheet, but appears to overlook the same materials are used e.g. acrylonitrile/styrene/acrylate copolymers with colorants dispersed within such as titanium dioxide, which make up a thermoplastic resin system with color produced with an extruder (equivalent to extruded thermoplastic). See col. 1, lines 15-68, col. 2, lines 1-27 and lines 55-68, and col. 3, lines 1-15. Further, the instant invention does not exclude fibers. The fibers are resinous thermoplastics and impart a granite-like appearance.

Applicant contends that patent '471 does not teach a thermoplastic resin system with color bonded and extruded to a material, to the contrary '471 describes the very system. The argument is not persuasive. Applicant points to '471 teaching a thermoplastic sheet having color. Applicant appears to disregard the teaching of '471 describing how thermoplastics are formed by extrusion at col. 2, line 10, inherently producing "extruded thermoplastic".

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Applicant alleges none of the references used in the 103 rejection teach the claimed invention. The Examiner does not agree. All references teach independently or in combination resins with color that are extruded to produce a thermoplastic extruded sheet. In fact, Kogowski actually teaches the same resins and mesh sizes, MacGregor teaches the same blend percentages, and all other cited references are combinable as they are all within polymeric extrusion art. No distinction is seen.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

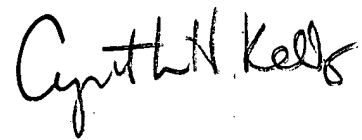
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'Tamra L. Dicus', with a long horizontal line extending to the right.

Tamra L. Dicus  
Examiner  
Art Unit 1774

June 10, 2003

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

A handwritten signature in black ink, appearing to read 'Cynthia H. Kelly', written in a cursive style.